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NETWORK APPLIANCE/BLAKELY 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER CHBOUKI, TAREK	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/777,418

Applicant(s)

ARMITANO ET AL.

Examiner

Tarek Chbouki

Art Unit

2100

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☒ Claim(s) 35-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/15/2005, 12/18/2006</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Claims 1-49 have been examined.

### Claim Objections

2. Claims 35-38 is objected to because of the following informalities: they depend respectively to method claims 30, 30, 32 and 33.

Claims 35-38 are interpreted as depending on claim 34. Appropriate correction is required.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 12 and 29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3 and 12 of copending Application No. 11102422. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 12 and 29 of the instant application substantially recite the limitations of claims 1, 3 and 12 of

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the cited US copending Application No. 11102422 for generating a response by the server in regards to a client request taking in consideration a policy control criteria.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Theimer, Marvin M. et al (hereinafter Theimer) US Patent No 5649099

As per claim 1, Theimer discloses:

**A method of operating a storage server, the method comprising:**

**receiving at the storage server, from a client, a first request to perform a storage- related operation relating to a set of data;**

(Column 4, lines 3-4, an intermediary making a request of a server on behalf of a client, touch base upon the client-server request).

**generating a second request in the storage server if the first request satisfies a defined criterion;**

(Column 4, line 5-8, server executes the ACP to determine whether or not the requestor--that is, the intermediary--has been granted by the client the right to make the given request, illustrate the activity in the server side in order to determine if the client access is granted.)

**sending the second request and information relating to the set of data from the storage server to a policy engine;**

(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria usage).

**receiving at the storage server, from the policy engine, a first response indicating a result of the policy engine having implemented a defined policy based on the information relating to the set of data;**

(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria being used in the client-server environment).

**and sending a second response in accordance with the first response from the storage server to the client.**

(Column 14, line 67 and Column 15, line 1, Upon successful authentication the server complies with the client's request, touch the action of server in regards to client request).

As per claim 2, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine is external to the storage server.**

(Column 14, lines 30-32, if an ACP can be used on multiple servers. In this case, either the ACP must be able to read a revocation object stored on a remote server, touch base upon determining if access data is stored on a remote server).

As per claim 3, Theimer discloses:

**A method as recited in claim 1, wherein the storage server and at least a portion of the policy engine are implemented in a single physical platform.**

(Column 14, lines 25-28, ACP restricting access to one or more objects that reside on a single server, then that server-or, more precisely, its associated stable storage-is the ideal storage site for the ACP's revocation object, touch base upon a single computer hosting the server and ACP).

As per claim 4, Theimer discloses:

**A method as recited in claim 1, wherein the first request is a request for a file managed by the storage server.**

(Column 1, lines 60-61, use of a print server to print a file that resides on a file server, illustrate the client request regarding to a file that managed by a file server).

As per claim 5, Theimer discloses:

**A method as recited in claim 1, wherein the first request is a request to create a file.**

(Column 2, lines 12-16, user (e.g., as member of a group) may have permission to read and write various files in a directory, but may lack permission to modify the access controls of those files or the directory they are in, indicate the file creation request).

As per claim 6, Theimer discloses:

**A method as recited in claim 3, wherein the policy engine approves or denies the request to create the file based on a file type of the file.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the policy control based on a file type).

As per claim 7, Theimer discloses:

**A method as recited in claim 4, wherein the file type of the file is indicated in the information relating to the set of data.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on a file type).

As per claim 8, Theimer discloses:

**A method as recited in claim 1, wherein the defined criterion has been defined in the storage server by the policy engine.**

(Column 2, lines 38-41, Access control lists (ACLs) are lists of (name, access right) tuples. Such lists may be implemented as bit tables, linked lists, or other suitable data structures. Servers maintain ACLs and use them to decide whether or not to grant any given access request, touch base upon the criteria of the policy control used by the server).

As per claim 9, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine determines whether to approve or deny the second request based on an identity of the client.**

(Column 2, lines 38-41, Access control lists (ACLs) are lists of (name, access right) tuples. Such lists may be implemented as bit tables, linked lists, or other suitable data structures. Servers maintain ACLs and use them to decide whether or not to grant any given access request, touch base upon determining if the client request is to be conducted after checking the ACL security policy).

As per claim 10, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine determines whether to approve or deny the second request based on an identity of a user of the client.**

(Column 6, lines 44-46, checking whether the user or process whose name is "name" has access rights to "resource" that allow "request" to be performed on "resource", touch base upon determining if the use is allowed to access the resource).

As per claim 11, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine determines whether to approve or deny the second request based on an identity of the storage server.**

(Column 9, lines 31-36, Authentication server 30 and its associated secure channels 35 can be included in system 1 for the purpose of two-party authentication, whether or not authentication server 30 is also used to support ACP authentication. Various other kinds of two-party authentication can also be used, touch base upon the security policy to determine the server identity).



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As per claim 13, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine determines whether to approve or deny the second request based on a quota.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on resource quotas).

As per claim 14, Theimer discloses:

**A method as recited in claim 1, wherein the policy engine determines whether to approve or deny the second request based on a number of times the set of data has been accessed during a period of time.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on access time limit).

As per claim 15, Theimer discloses:

**A method as recited in claim 1, wherein the storage server defers sending the client any response to the first request until the storage server receives the first response from the policy engine.**

(Column 15, lines 16-21, if a server can support only a limited number of revocation objects, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server. Any of a number of such allocation policies, including preallocation of all

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revocation objects among clients, illustrate the checking process of the server prior to honoring a client request).

As per claim 16, Theimer discloses:

**A method as recited in claim 1, further comprising:**

**responding to the first request at the storage server by using metadata in the storage server to determine that the set of data is stored externally to, and remotely from, the storage server;**

(Column 14, lines 30-32, if an ACP can be used on multiple servers. In this case, either the ACP must be able to read a revocation object stored on a remote server, touch base upon determining if access data is stored on a remote server).

**wherein the policy engine responds to the second request by retrieving the set of data from storage and provides the set of data to the storage server in conjunction with the first response.**

(Column 138, lines 32-37, using the server to check a value returned by the access control program thus executed; and if and only if the determination thus made by the server is that the client approves the service request, using the server to execute the service request, and otherwise using the server to deny the service request, touch base upon the feedback of ACP prior to the server honoring the client request).

As per claim 18, Theimer discloses:

**A method of operating a policy engine, the method comprising:**

**receiving at the policy engine, from a storage server, a first request and information relating to a set of data, the first request being in response to a storage-**

**related client request received by the storage server from a client and relating to the set of data;**

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(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria being used in the client-server environment).

**applying a defined policy in the policy engine using the information relating to a set of data;**

(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria usage).

**And sending a first response from the policy engine to the storage server to indicate a result of applying the defined policy, the first response to cause the storage server to send a second response to the client in accordance with the first response.**

(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria usage governing server response to a client request).

As per claim 19, Theimer discloses:

**A.method as recited in claim 18, wherein the policy engine is external to the storage server.**

(Column 14, lines 30-32, if an ACP can be used on multiple servers. In this case, either the ACP must be able to read a revocation object stored on a remote server, touch base upon determining if access data is stored on a remote server).

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As per claim 20, Theimer discloses:

**A method as recited in claim 18, wherein the storage server and at least a portion of the policy engine are implemented in a single physical platform.**

(Column 14, lines 25-28, ACP restricting access to one or more objects that reside on a single server, then that server-or, more precisely, its associated stable storage-is the ideal storage site for the ACP's revocation object, touch base upon a single computer hosting the server and ACP).

As per claim 21, Theimer discloses:

**A method as recited in claim 18, wherein the client request is a request for a file managed by the storage server.**

(Column 1, lines 60-61, use of a print server to print a file that resides on a file server, illustrate the client request regarding to a file that managed by a file server).

As per claim 22, Theimer discloses:

**A method as recited in claim 18, wherein the client request is a request to create a file.**

(Column 2, lines 12-16, user (e.g., as member of a group) may have permission to read and write various files in a directory, but may lack permission to modify the access controls of those files or the directory they are in, indicate the file creation request).

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As per claim 23, Theimer discloses:

**A method as recited in claim 22, wherein applying the defined policy comprises approving or denying the request to create the file based on a file type of the file.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the policy control based on a file type).

As per claim 24, Theimer discloses:

**A method as recited in claim 23, wherein the file type of the file is indicated in the information relating to the set of data.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on a file type).

As per claim 25, Theimer discloses:

**A method as recited in claim 18, further comprising using the policy engine to define a criterion in the storage server, for use by the storage server to determine when a subsequent client request is to be referred to the policy engine for resolution.**

(Column 2, lines 38-41, Access control lists (ACLs) are lists of (name, access right) tuples. Such lists may be implemented as bit tables, linked lists, or other suitable data structures. Servers maintain ACLs and use them to decide whether or not to grant any given access request, touch base upon the criteria of the policy control used by the server).

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As per claim 26, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on an identity of the client.**

(Column 2, lines 38-41, Access control lists (ACLs) are lists of (name, access right) tuples. Such lists may be implemented as bit tables, linked lists, or other suitable data structures. Servers maintain ACLs and use them to decide whether or not to grant any given access request, touch base upon determining if the client request is to be conducted after checking the ACL security policy).

As per claim 27, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on an identity of a user of the client.**

(Column 6, lines 44-46, checking whether the user or process whose name is "name" has access rights to "resource" that allow "request" to be performed on "resource", touch base upon determining if the use is allowed to access the resource).

As per claim 28, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on an identity of the storage server.**

(Column 9, lines 31-36, Authentication server 30 and its associated secure channels 35 can be included in system 1 for the purpose of two-party authentication, whether or not authentication server 30 is also used to support ACP authentication. Various other kinds of two-party authentication can also be used, touch base upon the security policy to determine the server identity).

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As per claim 29, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on a user-based quota.**

(Column 24, lines 6-9, A variety of default provisions are desirable in most or even all ACPs. These include expiration times, intended users, and intended access scope, illustrate the access restriction based on users).

As per claim 30, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on a quota applicable to the set of data.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on resource quotas).

As per claim 31, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on a quota applicable to the storage server.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on resource quotas).

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As per claim 32, Theimer discloses:

**A method as recited in claim 18, wherein applying the defined policy comprises approving or denying the second request based on a number of times the set of data has been accessed during a period of time.**

(Column 2, lines 58-60, access controls: Concepts such as restrictions over file types, access time limits, the homework example restrictions, or resource quotas, touch base upon the restriction of the request based on time limit).

As per claim 33, Theimer discloses:

**A method as recited in claim 18, further comprising the policy engine responding to the second request by retrieving the set of data from remote storage and providing the set of data to the storage server in conjunction with the first response.**

(Column 14, lines 30-32, if an ACP can be used on multiple servers. In this case, either the ACP must be able to read a revocation object stored on a remote server and Column 138, lines 32-37, using the server to check a value returned by the access control program thus executed; and if and only if the determination thus made by the server is that the client approves the service request, using the server to execute the service request, and otherwise using the server to deny the service request, touch base upon the feedback of ACP prior to a remote server honoring the client request)



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As per claim 48, Theimer discloses:

**A method of operating a storage server, the method comprising:**

**receiving at the storage server, from a client, a request to perform a storage- related operation relating to a set of data;**

(Column 4, lines 3-4, an intermediary making a request of a server on behalf of a client, touch base upon the client-server request).

**if the first request satisfies a defined criterion, then operating the storage server to invoke a policy engine configured to determine a disposition of the request;**

(Column 4, line 5-8, server executes the ACP to determine whether or not the requestor--that is, the intermediary--has been granted by the client the right to make the given request, illustrate the activity in the server side in order to determine if the client access is granted.)

**receiving at the storage server a response from the policy engine indicating a disposition of the request;**

(Column 4, line 5-8, server executes the ACP to determine whether or not the requestor--that is, the intermediary--has been granted by the client the right to make the given request, indicates the server response to a client request after consulting the ACP).

**and responding to the request in accordance with the response from the policy engine.**

(Column 15, lines 17-19, an allocation policy can be established to determine how many revocation objects any given client can have with respect to the server, indicates the policy criteria being used in the client-server environment).

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As per claim 49, Theimer discloses:

**A method as recited in claim 48, wherein the policy engine is external to the storage server.**

(Column 14, lines 30-32, if an ACP can be used on multiple servers. In this case, either the ACP must be able to read a revocation object stored on a remote server, touch base upon determining if access data is stored on a remote server).

Claims 34-41 and 43-45 and 47 are system claims respectively corresponding to method claims 1,4-7,9, 29, 30,14,15 and 31; Therefore are rejected under the same rational as claims 1,4-7,9, 29-30,14-15 and 31.

5. Claims 12 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer, in view of the "Storage Management Solution for distributed Computing Environments"  
October 1996 Hewlett-Packard Journal

As per claim 12, Theimer does not explicitly disclose:

**the information relating to the set of data comprises information specifically identifying the storage server from among a plurality of storage servers that are coupled to the policy engine.**

However the Hewlett-Packard journal in page 4, paragraph Enterprise-Wide Storage Management and Fig 4 page 5, illustrate the **information relating to the set of data comprises information specifically identifying the storage server from among a plurality of storage servers that are coupled to the policy engine.**

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Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to incorporate the teaching of Hewlett-Packard into the method of Theimer. One having ordinary skill in the art would have found it motivated to use **identifying the storage server from among a plurality of storage servers that are coupled to the policy engine** into the method of Theimer for the purpose of enabling a single point of control of the data management.

Claim 42 is a system claim corresponding to method claim 12; Therefore it is rejected under the same rationale as claim 12.

6. Claims 17 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer, in view of the Khalidi, Yousef A European Patent Application No EP 1 100001 A2 t

As per claim 17, Theimer does not explicitly disclose:

**using one of a plurality of storage protocols implemented by the storage server to access the set of data, the plurality of storage protocols including a block-level storage protocol and a file-level storage protocol,** However Khalidi discloses:

(Column 1, lines 9-11, secondary storage systems supporting both the file-level and block-level access protocols in computers).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to incorporate the teaching of Khalidi into the method of Theimer. One having ordinary skill in the art would have found it motivated to **using one of a plurality of storage protocols implemented by**

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the storage server to access the set of data, the plurality of storage protocols including a block-level storage protocol and a file-level into the method of Theimer for the purpose of enabling a wide range of storage protocols.

Claim 46 is a system claim corresponding to method claim 17; Therefore, it is rejected under the same rationale as claim 17.

## 7. Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-20040044744, Grosner, George et al  
US-20040078419, Ferrari, Stephen et al  
US-20020133561, O'Brien, Brett et al  
US-20020120741, Webb, Theodors S. et al  
US-20030046396, Richter, Roger K. et al  
US-20020042866, Grant, Robert et al  
US-20020087479, Malcolm, Pater  
US-6832313, Parker, Thomas Anthony  
US-6757753, Dekoning, Rodney A et al  
US-6401126, Douceur, John R. et al  
US-6606744, Mikurak, Michael G  
US-6523027, Underwood, Roy Aaron  
US-6324581, Xu, Yikang et al  
US-6256773, Bowman-Amuah, Michael K  
US-6253217, Dourish, James P et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarek Chbouki whose telephone number is 571-2703154. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on 571-2723696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

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[direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic

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CANADA) or 571-272-1000.

Tarek Chbouki

TC

Patent Examiner

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JEAN M. CORRIELUS  
PRIMARY EXAMINER

Art Unit 2162

Date 9/14/07